

## ABSTRACT / ZUSAMMENFASSUNG / ABREGE

04254602.8

An optical waveguide (10) comprises a silica substrate (11), a buffer layer (12) formed on the silica substrate (11), cores (13) formed on the buffer layer (12), and upper cladding layer (14) formed on the buffer layer (12), covering the cores (13). The thermal expansion coefficients of the buffer layer (12) and upper cladding layer (14) are set to be substantially equal. As a result, the stresses in the cores (13) are isotropic, effectively suppressing birefringence.